

CLAIMS

1. An battery unit, comprising:
  - a plurality of bicells wherein each bicell contains anodic exposed grids at a first end of said bicell and cathodic exposed grids at a second end of each bicell, said second end opposing said first end relative to a horizontal axis;
  - 5 a positive terminal wherein said positive terminal is configured to be in connection with said cathodic exposed grids;
  - a negative terminal wherein said negative terminal is configured to be in connection with said anodic exposed grids; and
  - a packaging envelope configured to enclose said bicells.
2. The battery unit of claim 1 wherein one of said terminals further comprises a tang.
3. The battery unit of claim 1 further comprising at least one cover strip configured to be in contact with said cathodic exposed grids.
4. The battery unit of claim 1 further comprising at least one cover strip configured to be in contact with said anodic exposed grids.
5. The battery unit of claim 1 wherein said positive terminal and said negative terminal further include an electrically conductive body portion having a lengthwise axis associated therewith, including a first region configured to be adhered to and in electrical contact with a second region extending along said axis having a plurality of apertures therethrough, and a third region configured for electrical connection to a conductor.
6. The battery unit of claim 5 wherein said positive and negative terminals further include a fourth region encapsulated by an electrically insulating material.

7. The battery unit of claim 6 wherein said insulating material encloses a first side, a second side, and two edges of said fourth region.

8. The battery unit of claim 1 wherein said packaging envelope further comprises a laminated, aluminized single sheet including a hot melt adhesive layer, said sheet being placed underneath said battery unit and folded over said unit and sealed.

9. The battery unit of claim 8 wherein said hot melt adhesive adheres to itself through said apertures of said positive and negative terminals.

10. A battery module, comprising:  
a plurality of battery units configured such that said plurality may be stacked;  
positive terminals each located at a first end of the battery unit, a first number of positive terminals being equal to the number of said plurality of battery units;  
negative terminals each located at a second end of the battery unit, said second end opposing said first end relative to a horizontal axis, a second number of negative terminals equal to the number of said plurality of battery units; and  
packaging envelope for each one of said battery units.

11. The battery module of claim 10, wherein a first battery unit is configured in an orientation and a second battery unit is configured in an orientation such that said positive terminal of said second battery unit is electrically connected to said negative terminal of said first battery unit, said second battery unit rotated around a horizontal axis 180 degrees such that first and second battery units create a stacked configuration.

12. The battery module of claim 11, wherein said configuration is repeated with additional battery units, alternating said first battery unit orientation and said second battery unit orientation.

13. The battery module of claim 10, wherein at least one of said battery units is further comprised of a plurality of bicells.

14. A method of electrically connecting a battery module, comprising:  
configuring a first battery unit and a second battery unit;  
locating positive terminals at a first end of said first and second battery units, a first number of positive terminals being equal to the number of said battery units;  
5 locating negative terminals at a second end of said first and second battery units, said second end opposing said first end relative to a horizontal axis, a second number of negative terminals equal to the number of said battery units;  
enclosing said battery units in individual packaging; and  
10 orienting said first battery unit and said second battery unit such that said positive terminal of said second battery unit is electrically connect to said negative terminal of said first battery unit, said second battery unit rotated around a horizontal axis 180 degrees such that first and second battery units create a stacked configuration.

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15. The method of claim 14, further comprising an additional plurality of battery units, said plurality of battery units oriented such that said configuration is repeated with said additional plurality.

16. The method of claim 15, wherein at least one of said battery units further includes of a plurality of bicells.